

1 **ABSTRACT OF THE DISCLOSURE**

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3 A gas centrifuge operating to separate gases

4 of differing chemical composition and molecular weight

5 by a centrifugal force field. Such a centrifuge is

6 operable to separate methane and carbon dioxide, and to

7 produce torque, and a cascade of such centrifuges is

8 operable to concentrate produced streams of carbon

9 dioxide and methane, and to produce torque. A compact

10 centrifugal gas processing system incorporating the gas

11 centrifuge with other centrifugal components, is also

12 provided.